

NOTES ON THE DISTRIBUTION AND BIOLOGY OF *TRAPEZITES GENEVIEVEAE* ATKINS, *SIGNETA TYMBOPHORA* (MEYRICK & LOWER) AND *HESPERILLA SARNIA* ATKINS (LEPIDOPTERA: HESPERIIDAE)

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Abstract

Biological notes and distribution records are presented for three uncommon species of trapezitine skippers: *Trapezites genevieveae* Atkins, *Signeta tymbophora* (Meyrick & Lower) and *Hesperilla sarnia* Atkins.

Introduction

Between 2000 and 2007, a number of observations were made of three endemic trapezitine skippers in SE Queensland. Although the larval food plants of each species are local but fairly widespread within temperate and subtropical biomes in eastern Australia, the skippers are uncommon to rare with short flight seasons and are found only within limited areas. It appears that further, individually specific requirements, possibly climatic, altitude and microhabitat associations, are necessary to each species and thus are probable subjects of conservation value that emphasise the importance of the particular biomes that support them.

Trapezites genevieveae Atkins is restricted to dense old-growth montane rainforest from the Barrington Ranges in New South Wales to the Blackall Ranges in SE Queensland; *Signeta tymbophora* (Meyrick & Lower) is found very locally in coastal rainforest from near Narooma in New South Wales to upland temperate rainforest at Bunya Mts in SE Queensland; *Hesperilla sarnia* Atkins occurs from SE Queensland to the Cairns area of northern Queensland (Braby 2000). All three species have been found in mixed wet sclerophyll/upland rainforest at Mapleton in the Blackall Ranges (personal observations). Further searches for larvae and adults of these species beyond the northern extensions of the Sunshine Coast (southern Queensland) and also at Eungella Range (hinterland of Mackay, northern Queensland) so far have been unsuccessful.

Observations

Trapezites genevieveae

Adults are rarely seen and fly mostly near the tree canopy but larvae or 'larval cats' [distinctive oblique leaf cuts] are more easily found on the food plant, *Lomandra spicata* (Xanthorrhoeaceae), which grows on dark, damp slopes and near river banks deep within the forest (Atkins 1999). It is recorded from disjunct localities in SE Queensland but seems to be not uncommon on the border ranges at Springbrook, Green Mountain and Binna Burra. The food plant extends much further north, to the Atherton Tableland in northern Queensland. In recent surveys I have found *L. spicata* in both

upland and lowland rainforests in the hinterlands of the Sunshine Coast, as far north as 15 km NE of Kin Kin, and also in a small area (containing about 50 plants) on the slopes of Mt Dalrymple, Eungella Range west of Mackay (possibly a new locality record for the plant). There were no larval eats at this latter locality. Recent observations (2006-07) of larvae confirm the skipper's presence at Mt Mee, Conondale Ranges, Maleny, Montville and Mapleton, with possible larval eats at Peachester and in the forests north of Kin Kin. A further search of areas west of Miriam Vale might prove fruitful.

Signeta tymbophora

In February 2007, I observed and collected a male flying in bright sunshine around and settling on 3 m high shrubs growing in a rainforest ravine in the Mapleton State Forest. Its food plants are various species of forest wire-grasses (Poaceae), *Gahnia* and *Carex* (Cyperaceae). A wire-grass was found nearby. *Lomandra spicata* and *Scleria sphacelata* also grow in this area. This is a new northern record for this small, dark skipper (probably about 20 km north of the inland locality at Bunya Mts).

Hesperilla sarnia

As with *T. genevieveae*, observations of adults of this fast flying, dark brown skipper are rare; however, larval leaf-tube shelters and zigzag cuts to the leaf are more indicative of its presence. More than 15 localities, both lowland and upland, are known from the Sunshine Coast and hinterland (Atkins 2004). In 2006, three eggs were found on *Scleria sphacelata* (Cyperaceae), two on one plant at the same Mapleton forest locality as *S. tymbophora* and one on a plant at Forest Glen. The eggs were all located on the upper side of leaves close to the base of the plants. The eggs were 1 mm in diameter and had approximately 20 vertical ribs; all three appeared to be infertile. In February 2007, a slightly worn female was collected resting on grass growing within a new housing estate at Forest Glen. Compared with males, it was somewhat reluctant to fly and, when disturbed, flew rather sluggishly. This is probably the fifth record of a female of the southeastern form of this skipper.

References

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